

REMARKS

Applicant has carefully considered the rejections made in the Final Office Action mailed December 10, 2008 (the "Office Action"). Claims 20 and 42 have been amended, and support for these amendments can be found at least in paragraphs [0060], [0061], [0063], [0064], and [0101] of the published subject application.

Claims 20-44 are pending in this application and stand rejected. Applicant respectfully submits that in view of the amendments made, the remarks that follow, and the Request for Continued Examination submitted herewith, the application is in condition for allowance. Applicant earnestly solicits the Examiner for a Notice of Allowance.

I. 35 U.S.C. § 112 Rejection

Applicant respectfully traverses the Office Action's rejection of claim 42 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has amended claim 42 to include "a control unit" that executes the "operating program" and believes that amended claim 42 is in compliance with § 112. Therefore, applicant respectfully requests allowance of this claim.

II. 35 U.S.C. § 103 Rejections

Applicant respectfully traverses the Office Action's rejection of claims 20-44 under 35 U.S.C. § 103.

A. Claims 20-24, 26-27, 30-34, 36-40, 42, and 44

Applicant respectfully traverses the Office Action's rejection of claims 20-24, 26-27, 30-34, 36-40, 42, and 44 under 35 U.S.C. § 103(a) as being

unpatentable over Liotine (U.S. Patent No. 4,529,980) in view of Heitschel (U.S. Patent No. 5,576,701).

1. *Liotine is quite different and unlike the claimed invention.*

Liotine discloses a system to change the identification code in a transmitter and a receiver. As explained in Liotine, the receiver uses a previously stored identification code to perform a random number generation algorithm to generate a new identification code. The receiver stores the new code in memory and transfers the new identification code to a transmitter through a light emitting diode when the receiver is placed in close proximity to the transmitter. See Liotine, col. 4, ll. 44-54.

The rejection correctly notes on page 5 that Liotine is different from the prior claims because it fails to disclose sending a command from one object to another object to which it is paired, verifying that the two objects contain the new common key, and the other object refusing to execute the command if the two objects do not contain the new common key. However, Liotine also fails to teach other aspects of the claimed invention.

a. Liotine fails to teach a common key as required by the claimed invention.

Liotine teaches a receiver generating an identification code and transmitting that code to a transmitter. Liotine, however, fails to teach a common key as required by the claimed invention. The receiver and transmitter of Liotine can be read as sharing an identification code, but, in Applicant's reading, they do not share a common key.

The rejection is not explicit in all respects, but it seems to equate the identification code in Liotine with the common key of the claimed invention. The rejection also seems to equate generating a new identification code in Liotine with providing a new common key as defined in the claimed invention. However,

in Applicant's reading, Liotine's identification code reads more closely on the pairing event in the present claims. In particular, the subject application refers to Liotine as an example of pairing. Autret, par. [0004].

As explained in the subject application, pairing occurs when a common identifier is associated with at least two objects as in Liotine. See Autret, pars. [0004] and [0052]. The sharing of a common identifier makes it possible for one object to recognize controls originating from the other object and respond to the controls. For example, in a pairing procedure, an identifier can be transmitted from a control unit to a control point, which records the identifier, or from the control point to the control unit, which records the identifier.

Conversely, claim 20 requires "objects containing a common key" and "at least two of the plurality of object being paired." That is, as required by claim 20, there are at least two bidirectional objects that are paired and at the same time share a common key. Similarly, claims 30, 36, and 42 each requires a memory "adapted to store at least one common key and at least one piece of information on pairing." (emphasis added).

Being paired and sharing a common key are both required and are two separate requirements; sharing a common key is different and distinct from being paired. As explained in the subject application disclosure,

The [bidirectional] object . . . has a memory containing programs used in the logical unit and in particular the operating programs of the object [T]he memory can also contain at least one common key; the object can also contain pairing information, for example identifiers of other objects stored in the memory.

Autret, par. [0055].

Accordingly, in an installation of objects, there can be as many pairings as there are pairs of objects, but this is not necessary. However, independent of any pairings, a common key can be provided to the installation. As explained in the subject application disclosure, "the common key can be globally provided to all

the transmitters of an installation, without consideration of the pairings.” Autret, par. [0101] (emphasis added).

Because the claimed invention requires providing a common key and the pairing of objects in an installation, sub-groups can be created within the installation. As explained in the subject application disclosure, “it can be imagined that the pairings are defined within two distinct sub-groups and that a common key is assigned to each of the sub-groups.” Autret, par. [0057]. If the identification code of Liotine were equated to the common key of the claimed invention, such sub-groups would not be possible.

- b. Liotine fails to teach objects being paired even though the objects do not contain a common key.

Even if the identification code in Liotine were equated to the common key of the claimed invention as the Office Action suggests, the Liotine system still would not teach the claimed invention. For example, to be paired, two objects must share a common identifier. However, when the receiver in Liotine generates a new identification code, it does not share that identification code with the transmitter until the receiver and transmitter are placed within close proximity to one another and the new code is transmitted to the receiver. Accordingly, when the receiver generates a new identification code, it is not paired with the transmitter.

Conversely, claim 20 requires “refusal by the other object to execute the command if the two objects do not contain the new common key, although the objects are paired.” (claim 20) (emphasis added). This is quite different and unlike the system disclosed in Liotine.

Applicant notes that this limitation of claim 20—that the other object refuses to execute the command if the two objects do not contain the new common key, although the objects are paired—is consistent with the preamble of claim 20. That is, the preamble of claim 20 requires that two objects are paired, but, consistent with the body of claim 20, a command sent from one object to the

other object is only executed by the other object “when both of the paired objects contain the common key.”

- c. Liotine fails to teach reprogramming a plurality of bidirectional objects without reprogramming the pairing.

Also unlike claim 20 of the subject application, Liotine fails to teach “reprogramming a plurality of bidirectional objects . . . without reprogramming the pairing.” Rather, as explained above, Liotine teaches a receiver generating a new identification code and the receiver transmitting the new code to the transmitter. As explained above and in the subject application, the identification code is pairing information and is not tantamount to a common key.

Accordingly, Liotine teaches how to reprogram the pairing between the transmitter and receiver. Conversely, claim 20 specifically recites reprogramming “without reprogramming the pairing.” Therefore, Liotine is quite different and unlike the claimed invention.

2. Heitschel does not make up for the deficiencies of Liotine.

As explained above, Liotine does not teach the claimed invention. However, Heitschel is also quite different from the claimed invention and does not make up for the deficiencies of Liotine discussed above.

For example, Heitschel teaches a method of operating a door actuating system using a remote transmitter. The remote transmitter transmits a signal of coded words to a control unit of the actuating system, and the signal of coded words must match a sequence of allowable coded words stored in the control unit to operate the door. This method of Heitschel teaches that the remote transmitter and the control unit are paired, as in Liotine, because they both share a piece of pairing information. the sequence of coded words.

However, nothing in Heitschel teaches, discloses, or suggests a common key as required by the claimed invention. Because Heitschel does not disclose a

common key, Heitschel also does not disclose one object refusing to execute a command from another object when both objects do not contain a common key or a new common key even though the objects are paired. Furthermore, Heitschel does not teach reprogramming a plurality of objects without reprogramming the pairing of those objects.

3. *The claimed invention is not obvious over Liotine in view of Heitschel.*

For at least the reasons as stated above, applicant respectfully submits that claims 20-24, 26-27, 30-34, 36-40, 42, and 44 are not obvious over Liotine in view of Heitschel. Therefore, applicant respectfully requests allowance of these claims.

B. Claims 25, 28, 35, 41, and 43

Applicant respectfully traverses the Office Action's rejection of claims 25, 28, 35, 41, and 43 under 35 U.S.C. § 103(a) as being unpatentable over Liotine in view of Heitschel and further in view of Clark (U.S. Patent No. 5,148,159). As explained above, claims 22, 30, and 36, from which these claims depend, are not obvious over Liotine in view of Heitschel. Furthermore, Clark does not make up for at least the deficiencies of Liotine and Heitschel discussed above.

For at least these reasons, applicant respectfully submits that claims 25, 28, 35, 41, and 43 are not obvious over Liotine in view of Heitschel and further in view of Clark. Therefore, applicant respectfully requests allowance of these claims.

C. Claim 29

Applicant respectfully traverses the Office Action's rejection of claim 29 under 35 U.S.C. § 103(a) as being unpatentable over Liotine in view of Heitschel and further in view of Little (U.S. Patent No. 7,046,991). As explained above,

